

REMARKS:

It is well established and substantive law that when considering the question of whether an apparatus consisting of a combination of elements is obvious, it must be determined whether the combination (rather than the individual elements) is inventive or non-obvious. In the case of mechanical inventions of the type claimed by applicant, it is very rare to find new elements in an apparatus.

Claim 1 has been amended to ensure that the claims of this application patentably distinguish the present invention from the cited prior art. As stated in the preamble portion of the specification, this invention relates to a modular swimming pool heating system for installation in the attic of a house. By making the system modular it is possible to insert the system in the attic of an existing house.

Claim 1 as amended calls for a combination of elements including, *inter alia*:

- a casing for mounting in an attic of a building in an attic,
- a heat exchange unit for removable mounting in the casing,
- an opening in the casing permitting access to the casing,
- a cover removably mounted on the casing for closing the opening;
- inlet sleeves for removable attachment to one side of the casing for introducing air into the casing, and
- elongated, flexible ducts for connection to the inlet sleeves for receiving warm attic air and feeding the air to said casing for passage through the heat exchange unit to heat any pool water circulating therethrough.

The above listed combination of elements is not taught by the Palmer patent. Figure 16 of the Palmer patent illustrates a heat exchanger 46 which is described in column 19, line 45 to column 20, line 45 of the patent. The Palmer heat exchange unit includes a sheet metal cabinet 240 forming a box structure with a protective grill 48 mounted on the front side for safety purposes. It is readily apparent that the heat exchanger 46 is a prefabricated, closed structure which is installed in an attic as a unit. The Palmer heat exchanger 46 is not a modular swimming pool heating system as claimed in the claims of this application.

The Palmer heat exchanger 46 does not include

- (i) a heat exchange unit for removable mounting in a casing,
- (ii) a cover removably mounted on said casing for closing an opening in the casing, whereby the heat exchange unit can readily be mounted in the casing,
- (iii) fan units for removable mounting on a second side of the casing opposite one side of the casing for drawing air into the casing through the heat exchange unit, or
- (iv) elongated, flexible ducts for connection to inlet sleeves for receiving warm attic air from locations remote from the casing.

Because the Palmer heat exchanger 46 is a sealed unit, there is no opening in the casing of the heat exchanger permitting access to the interior of the casing for receiving a heat exchanger when the casing is mounted in an attic.

By the same token, there is no cover removably mounted on the casing of the Palmer heat exchanger for closing an opening.

Since there is only one fan in the Palmer heat exchanger, there are no inlet sleeves for removable attachment to the casing of the Palmer heat exchanger. As described in column 19, lines 53 to 55, motor supporting arms 262 of the Palmer fan are bolted to 24 inch venturi insert 54 which provides a support structure for a motor 52 and fan blade 50. The venturi insert 54 is a fixed part of the Palmer heat exchanger and does not constitute a removable inlet sleeve for attachment to one side of the casing for introducing air into the casing.

The Palmer heat exchanger does not include fan units for removable mounting on a second side of the casing opposite one side thereof for drawing air into the casing and through a heat exchange unit. Because the Palmer heat exchanger 46 is not a modular structure, there is no need for fan units.

The Palmer heat exchanger does not include elongated, flexible ducts for connection to inlet sleeves for receiving warm attic air from locations remote from the casing and feeding the air to the casing for passage through the heat exchanger.

Aside from the fact that there would be no incentive for the person skilled in the art to which the present invention relates to combine the teachings of Fleischmann and Elkins with those of Palmer, the resulting combination of elements would not be the combination claimed in each of the claims of this application. The Fleischmann patent discloses a solar heating system including an inlet 68 for introducing air from an upper extremity 71 of attic air space 10 to a

duct 66. The inlet 68 of Fleischmann does not constitute "elongated, flexible ducts for connection to said inlet sleeves for receiving warm attic air from locations remote from said casing and feeding said air to said casing". Even though the Fleischmann patent drawings are not to scale, it is readily apparent that Fleischmann like Palmer was not concerned with creating a simple, modular structure for heating swimming pool water. The Fleischmann inlet 68 is permanently attached to the duct 66. The Fleischman structure is neither modular nor adapted to be assembled in the attic of a house.

Moreover, like Palmer, Fleischmann does not teach the use of a casing including an opening permitting access to the interior of the casing for receiving the heat exchanger when the casing is mounted in an attic, or a cover removably mounted on the casing for closing the opening after the heat exchange unit has been mounted in the casing, as claimed in each of the claims of this application. Fleischmann does not teach the use of inlet sleeves for removable attachment to one side of the casing, or fan units for removable mounting on a second side of the casing opposite said one side for drawing into said casing.

Since the Elkins patent relates to a fan-equipped air delivery vent for enhancing the flow of air from a heating/cooling system into a room, it is clearly arguable whether the Elkins reference constitutes analogous prior art. Admittedly, the vent of Elkins is used in a heating/cooling system. However, the patent is properly classified in ventilation. Applicant's invention is a swimming pool water heating system. In any event, Elkins does not make up for the deficiencies of Palmer and Fleischmann. Elkins does not include elements (i) to

(iv) listed above. The Elkins vent could be considered to be a cover. However, there would be no reason to mount the vent on the heat exchanger 46 of Palmer, and even if the Elkins vent was added to Palmer's apparatus, the resulting combination would not be the combination of elements claimed by applicant.

It is only by mosaicing references that anything resembling the combination of elements proposed by applicant can be found in the prior art. However, the combination thus produced is still not applicant's invention. Accordingly, it is submitted that the amended claims are in condition for allowance and notice to this effect is solicited